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ABSTRACT

In response to recently raised concerns about the effective integration of general education into community college occupational programs, this report offers a review of the literature on general education and its place in the vocational curriculum. First, definitions of general education are presented and synthesized into the following operational definition: "General education is what all individuals granted a degree have in common in terms of the development of knowledge, attitudes, values, and skills to enhance the student's participation in social, technological, and cultural environments." Next, historical perspectives on general education are traced from ancient Greece to the present. The next section looks at the discipline-based, integrated, and competency-based curriculum structures used to provide general education in community colleges. After examining some internal and external areas of concern about general education expressed by a selected group of scholars, the report reviews various justifications that have been put forth for including general education in occupational programs and analyzes positions on the amount of general education that should be included in these programs. The final sections highlight research findings and statements stressing the importance of general education in occupational programs. (DMM)

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A REVIEW OF THE GENERAL EDUCATION COMPONENT IN COMMUNITY COLLEGE OCCUPATIONAL PROGRAMS

A TECHNICAL REPORT

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INTRODUCTION

Junior colleges were actually the first collegiate institutions in America to introduce the general education component into a program of study (Harrison, 1973). Such courses as those in the humanities, surveys of science, and surveys of social studies, received popular support by community colleges, which peaked during the 1930's. Accepting that specialization need not be at odds with a liberal education, community colleges promoted occupational education graduates as competent in the use of many general education skills. The belief was that courses should be developed in occupational programs as integral parts of a body of knowledge essential to personal competence and intelligent community living.

Recently, however, concerns have been raised questioning the integration of a general education into the occupational programs. Boyer and Levine (1981) maintain that many community colleges have never reached agreement regarding the substance of general education within curricular programs. However, since it can be assumed that general education will remain a part of the occupational curriculum, it is necessary for community college administrators to understand several concerns effecting a satisfactory integration.

This technical report includes an analysis of (a) definitions of general education; (b) historical perspectives of general education; (c) United States Community College general education structures; (d) issues confronting general education; (e) justification of general education in the occupational programs;

(f) amounts of general education in occupational programs; and (g) importance of general education in the occupational programs.

Definitions of General Education

Definitions of general education abound in the literature. There are almost as many definitions as there are research scholars. Analyses of 20 authors' definitions of general education yielded three distinct classifications: (a) descriptive, (b) prescriptive, and (c) operational. Due to the nature and various interpretations applied to the operational definitions, only the descriptive and prescriptive definitions were extracted. Nevertheless, the common elements and the unique elements of these definitions were used to form an operational definition of general education for this study.

The literature search revealed numerous works, most of which offered operational definitions of general education. Thirteen descriptive and prescriptive definitions were selected from the literature. The authors of descriptive definitions include Barlow (1982), Boyer and Levine (1981), Harlacher (1982), Hillway (1958), McGrath (1972), Piland (1981), and Riley (1980). The authors of prescriptive definitions include Cobb (1983), Eaton (1982), Klein (1980), Marsee (1979), Martin (1983), and Roueche and Roueche (1982).

1. Barlow (1982) devoted attention to an intrinsic perspective. Students should obtain (a) a sense of personal competence, (b) personal growth in an aesthetic expression, (c) personal growth in integrity, (d) personal growth in

cooperativeness, and (e) growth in a heightened sense of altruism (pp. 26-27). Barlow argued that a general education is, in fact, vocational depending upon the interest of the student. In many respects these two areas of education (general education and vocational education) are miscible, each dissolves into the other (p. 21).

2. Boyer and Levine (1981) defined general education as that which "concerns itself with shared life experiences and focuses on areas of interdependence" (p. 33). The authors proposed six broad components of a general education (a) "shared use of symbols, (b) shared membership in groups and institutions, (c) shared producing and consuming, (d) shared relationships with nature, (e) shared sense of time, and (f) shared values and beliefs" (pp. 33-34).

3. General education, as defined by Harlacher (1982) "is responsible for the preparation of students for the obligations they have in common as citizens in a democracy and enables them to participate in a wide range of life activities and enhances the overall quality of life in the community" (p. 100). Furthermore, the genesis of the curriculum "encases everything from traditional education to career training to coping with life" (p. 40).

4. According to Hillway (1958), general education is that which provides for the individual:

(a) the ability to effectively use language and mathematics,

(b) a comprehensive and usable knowledge of nature and science,

(c) an understanding of the human society,

(d) an appreciation of the fine arts,

(e) ethically sound attitudes toward people,

(f) deep loyalty to the worthwhile institutions of contemporary society, and

(g) confidence in people's capacity for improving their world. (p.98)

5. McGrath (1972) defined general education as that kind of education "which provides a common base of knowledge and which stresses behavior in a free society in terms of motives and attitudes" (p.25). General education is further regarded as the "breadth or complement" component of the undergraduate curriculum.

6. Piland (1981) defined general education as "that aspect of the institutional program which has as its fundamental purpose the development and integration of every student's knowledge, skills, attitudes, and experiences so that the student can engage effectively in a lifelong process of inquiry and decision-making" (p. 34). Furthermore, "students should be able to interrelate knowledge within a broad area and perceive the implications this integrated knowledge has for them and for the world in which they strive to survive" (P. 35).

7. Riley (1980) defined general education as that which:

(a) develops a student's critical and analytical intelligence,

(b) prepares the student for the entry into work,

(c) transforms the student within institutions,

(d) acquaints the student with classical knowledge,

(e) trains the student in moral, religious, social, and economic skill and values, and

(f) develops the whole person. (p.300)

8. Cobb (1983) defined general education as ". . .that part of the curriculum which provides ample opportunity. . .to identify and address a common set of issues and questions about the world, both as it is and as it should be". There are three qualities essential as student outcomes: "to be able to think systemically, grasp ethical issues, and integrate differing perspectives" (p. 354).

9. Eaton (1982) defined general education as that which is concerned with the ". . .development of a wide range of skills that assist individuals in leading productive, meaningful, and humane lives in complex social, technological, and cultural environments" (p. 73).

10. As defined by Klein (1980), general education is the courses "designed to afford students more efficient preparation for the responsibilities which they share in common as citizens in a free society and for wholesome and creative participation in a wide range of life activities" (p. 4). General education is that which prepares men and women for a satisfying personal life, happy family and social relationships, and responsible citizenship in a free society, by acquainting them with our common cultural heritage, by helping them to integrate the subject matter of related disciplines, and by developing skills, abilities, attitudes, and values (p. 4).

11. Marsee (1979) defined general education as that part of the curriculum that "should help people live with themselves, develop wisdom and character, mature psychologically, and continue a program of life-long learning" (p. 2). He calls for general education courses that pertain directly to the lives of students, that encourage them to take responsibility for their own learning, and that provide them with an understanding of what scholarly work entails.

12. Martin (1983) defined general education as "that which prepares the student for a career as well citizenship" (p. 36). The teacher and the student may define general education by way of specialized education, thus using the author's example, citizenship may be enhanced through vocationalism.

13. Roueche and Roueche (1982) defined general education "as a preparation for effective living in contemporary societies" (p. 31). An assumption in the authors' definition is that general education will provide for the students "the ability to read, write, study, and figure well enough to be successful. . ." (p. 31).

Analysis of the 13 selected definitions yielded 23 elements common to two or more of the definitions. These elements were grouped into three clusters dependent upon the frequency found in the definitions. The cited elements range from acquisition of survival or coping skills to the realization of one's potential as an individual. The varied elements center around a common theme: the development of the student as a person as opposed to the communication of traditional academic knowledge.

The cluster of most frequently stated general education elements, found in more than five of the definitions, was enhancement of citizenship in a free society" and "instillment of critical thinking" (Boyer & Levine, 1981; Cobb, 1983; Harlacher, 1982; Hillway, 1958; Martin, 1983; McGrath, 1972; Piland, 1981; Riley, 1980; Roueche & Roueche, 1982). A second cluster of elements common in four or five of the definitions includes: (a) development of knowledge necessary for lifelong learning, (b) development of attitudes, (c) integration of subject matter, (d) development of personal values, and (e) the cultivation of heritage (Barlow, 1982; Boyer & Levine, 1981; Cobb, 1983; Eaton, 1982; Harlacher, 1982; Hillway, 1958; Klein, 1980; Martin, 1983; McGrath, 1972; Piland, 1981; Riley, 1980; Roueche & Roueche, 1982).

A third cluster includes the following elements found in two or three of the definitions: (a) establishment of social relationships and cooperation, (b) enhancement of leadership abilities, (c) development of moral and religious training, (d) promotion of meaningful and humane lives, and (e) satisfaction of personal life and family (Barlow, 1982; Boyer & Levine, 1981; Cobb, 1983; Eaton, 1982; Harlacher, 1982; Hillway, 1958; Klein, 1980; Marsee, 1979; McGrath, 1972; Piland, 1981; Riley, 1980). Several unique elements exist in the selected definitions. These elements were clustered into a single group. The criterion used to cluster the unique elements was the frequency in which the elements were found in the cited definitions. These elements were (a) enhancement of specialized skills, (b) promotion of basic

skills, and (c) development of an appreciation for fine arts and recreation (Harlacher, 1982; Marsee, 1979; Roueche & Roueche, 1982).

General education is concerned with the development of skills or the acquisition of knowledge precisely for their applicability to a job, a career, or another specialization. It is through this vocational approach that integration of knowledge occurs. In this sense, general education focuses attention upon goals that are desirable for all persons. However, certain subject matter areas contribute more toward some of these goals than others, but it was never intended that general education consist of a defined list of subject matter areas. Straying from the concept that general education should provide students with a total education, certain scholars have associated the curriculum with a specialized function (Harlacher, 1982). Barlow (1982) and Harlacher (1982) state that the subject matter of vocational education can make real contributions toward achieving some of the goals of general education.

Roueche and Roueche (1982) reported that more than half of the entering freshman class reads below the eighth grade level. As such, efforts are made to expand the function of general education to include developmental content. The authors state that no matter whose definition for general education one uses, a basic underlying requirement is that enrolling college students be able to read, write, study, and figure well enough to be successful in freshman courses. Arguing that if general education is to prepare learners for effective living in

contemporary society, Roueche and Roueche contended that inclusion of basic skills programs is necessary.

Harlacher (1982) contends that "citizens of communities want and need the general skills and values necessary for living their lives in harmony with others" (p. 48). General education must be comprehensive enough to permit citizens to broaden their interests and insights in diverse areas including the fine arts and recreation. Supporting this contention, Harlacher cites the general education programs at San Joaquin Delta College and Florida Junior College at Jacksonville. The Program's objectives are to do the following:

1. Use training in the arts and recreation to allow students to interact effectively with the environment;
2. Tap creative and artistic potentials of students in order to build self-confidence and overcome failure; and;
3. Present artistic, musical, dramatic, and other recreational performance as a means of educating citizenry (p. 49).

An operational definition was drawn through a process of synthesizing and analyzing the common and unique elements in the cited definitions. It was deemed necessary to draw from six common and two unique elements for the construction of the operational definition. The following is the operational definition of general education in this study: General education is what all individuals granted a degree have in common in terms of the development of knowledge, attitudes, values, and skills to

enhance the student's participation in social, technological, and cultural environments.

Historical Perspectives of General Education

Despite the apparent simplicity of the elements describing general education, the nature and aims of the curriculum have changed over the years. Gaff (1980) linked the origins of general education to the ancient Greeks, who regarded education not just as an individual pursuit but as ". . .a communal activity by which a community preserves and transmits its physical and intellectual character" (p. 17). Conrad (1983) contends that Greek society founded the idea that education is ". . . culture and not simply the transmission of, or knowledge about, culture" (p. 1).

Furthermore, it was through this culture that only the freed man had the privilege of being educated for citizenship. Thus, education had both a broad and common basis as well as a specialized training necessary for intellectual pursuits. Although each culture had its own definition of a generally "educated person," education was a moral activity valued for instilling national unity. For the Greeks, a liberal education was seen as a prerequisite for vocationalism. As such, the liberally educated citizen possessed competencies in the use of language, was widely knowledgeable about society and had a sense of history.

During the Middle Ages, the liberal arts were formalized into the trivium--grammar, logic, and rhetoric--and quadrivium--arithmetic, geometry, astronomy, and music. Such

practices were the foundations for contemporary programs of general education that involve the core approach (Gaff, 1980).

During the 17th and 18th centuries, colleges and universities in the United States offered curricula modeled after the English universities. While opinions and purposes changed somewhat, the expectations remained intact: ". . .to make a man or woman more wise, more creative, more compassionate, more responsible, and more useful" (Rudolph, 1977, p. 2).

Changes in courses of study became a matter of need with the increased demand for specialization (Gaff, 1983). Rudolph (1977) observed that conflict increased between general education and the specialized curriculum, this resulting in an unpredictable but constant change in emphasis from 1636 to the present. Gaff (1983), too, noted the pendulum swings of emphasis through the centuries.

Measures to invoke reform were called upon because of "three principle evils" discovered in the standard liberal arts programs (Hillway, 1958, p. 96):

1. Subject matter was being taught for its own sake rather than for what it might mean in the life of the student.
2. Every student was taught as if it were an isolated body of knowledge with no relation to any other subject.
3. Classes were taught as if every student were a specialist.

As an outgrowth to the initial change, four distinctive philosophical approaches to general education arose. Idealism was exemplified by the view of John Henry Newman who saw the

university serving simply as a "setting for teaching and learning" (Gaff, 1983, p. 3). "The context within which teaching and learning ought to occur is a community of scholars" (Newman, cited in Gaff, 1980.). The goal for Newman was a liberal education without direct practical or vocational application, but one that prepares individuals for all of life (Gaff, 1980).

It was the entry of the German research university in 1819 that appealed to a progressive sector within United States higher education. It was the rise of the research university that did much to cause a shift in the importance and vitality of the liberal arts curriculum (Cadwallader, 1983). Supporters of this progressive philosophy, such as Alfred North Whitehead, the philosopher and mathematician, saw ". . .no essential difference between general education and specialized education: both are integral parts of a full education" (Gaff, 1980, p. 18). Further, within the progressive camp, Bailey (1976) contends that education must serve three basic purposes:

1. Helping persons anticipate and increase their capacity for creative engagements with major predictable changes in their stages of development;
2. Helping persons to cope, to work, and to use their free time in ways that minimize neurotic anxiety and boredom and that maximize inner fulfillment and joyful reciprocities;
3. Helping individuals to learn the arts of affecting the enveloping policy in order to promote justice and to

insure the blessings of liberty for others as well as for themselves. (p. 254)

This approach suggests a necessity for general education as a "supplement to specialization as a way of making the total education more useful" (Gaff, 1980, p. 18).

The theme of philosophy can best be represented by Robert Maynard Hutchins' view of general education within the American system of higher education. According to Hutchins, institutions should be responsible for providing an essential core of knowledge. To accomplish this, a specific core within the curriculum should encompass the teaching of the "Great Books" (Gaff, 1983, p. 4). Likewise, Boyer and Levine (1981) insist on a particular content of general education that is rooted in the belief that ". . . individualism, while essential, is not sufficient" (pp. 32-34).

Gaff (1983) recognizes the work of Clark Kerr's "pragmtism" as best personifying the final philosophical perspective. Kerr defines a "multiversity" as "an institution comprised of many communities: the community of the undergraduate, the graduate, the humanist, the social scientist. . ." (p. 6). General education plays a vital part within the total community. The differing philosophical views of general education highlight the debates concerning the role and content of the curriculum during the 20th century. It was during the early decades of the century that the pendulum was temporarily "poised" (Perkins, 1985, p. 18).

One positive outgrowth during this period was a quest to restore common learning by way of reform movements. Efforts

resulted in a number of experimental courses. Within the curriculum at Columbia, the Great Books colloquium was introduced (McGrath, 1976). Experimental colleges emerged at St. John's and Sarah Lawrence. An example of the goals and ideals of these experimental colleges is portrayed by the course descriptions found at Sarah Lawrence College:

> The academic work of a single course must pass readily across conventional subject boundary lines as to the interests and needs of the individual students. The curriculum of Sarah Lawrence College consists, therefore, of the recognized formal disciplines of our time. The experimental element enters in trying out new approaches, fresh materials, untested methods for these departments of study. . .(to insure) the total development of the student. (Benezet, 1971, p. 68)

Reform measures were also implemented within the existing universities of Florida, Minnesota, and Michigan State (McGrath, 1976).

It was during the period of the 1920's and 30's that is described as the ". . .fullest flowering of the liberal education within higher education (Winter, McClelland, & Stewart, 1981, p. 3). This is not solely due to the many reform efforts but also to the expansion of student enrollments throughout the 20's and early years of the Depression. According to Benezet (1971) vast numbers of potential workers were unable to find work, prompting them to attend college upon graduation from high school. Both colleges and students agreed that the programs of learning should

not stress training of specific skills or be just for investment purposes for making a living. The curriculum was to be a new general education with two common features: (a) "broad abstractions and basic principles; and (b) attention would be directed away from vocationalism and graduate education" (Winter, McClelland, & Stewart, 1981, p. 4).

An increased focus on general education continued into the 1940's. In 1945, a Harvard faculty committee released a report declaring that the general education curriculum was a needed remedy to "class divisiveness and as a common bonding device for high school students destined for different futures" (cited in Rudolph, 1977, p. 258). Harvard's "Red Book," as described by Rudolph, was an "act of public service" (p. 259) warning that American democracy and social stability were being threatened by a shift in political power, ". . .from the educated few to the unenlightened many" (p. 259). Unfortunately, the author notes that the movement had run its course by the late 1950's. McGrath (1976) viewed the Harvard reform movement as a much more viable and permanent agent. McGrath (1976) suggested that due to the curricular patterning of the 1940 decade as many as one- half of the American colleges had initiated reform measures in general education.

Gaff (1983) stated that where highly publicized general education competencies revamped the courses of study during the 1940's and 50's, ". . .less publicized erosion of those requirements took place in the 60' and 70's" (p. 12). Rudolph (1977) contends that the breadth and distribution of general

education courses became the "hobby horse" of new presidents, ambitious deans, "and. . .the well meaning humanists of the sort who were elected to curriculum committees as a gesture of token support for the idea of liberal learning" (p. 253). More specifically, various authors cast blame for the present condition of general education on a number of occurrences throughout the decade; Winter, McClelland, and Stewart (1982) connect American involvement in the Vietnam War to the shift in curricular priorities. The authors agree that "some of the anguish, bitterness and cynicism aroused by the war rubbed off on the universities that had, in the minds of many, made it possible" (p. 5). Kerr (1963) also noted that a connection had been made between higher education and national government and higher education had become a "prime instrument of national purpose" (p. 87).

United States Community Colleges' General Education Structure

Curricular disorders and a lack of curricular uniformity existed in 20th century higher education (Rudolph, 1977). As a means of implementing an effective general education curriculum in transfer and vocational education programs, community colleges have implemented various curricular approaches. This section will describe the (a) discipline, (b) integrated and (c) "competency-based approaches in relation to implementation of the college education curriculum.

Discipline Related Curriculum

With the decline of the 19th century, classical education was tied to the success of the industrial revolution, with its demand for technically and managerially trained workers (Conkright, 1982, p. 5). A related cause was the need for faculties to become professional by "claiming ownership of a set of specialized skills quite distinct and separate from those of their colleagues in other disciplines" (p. 5). The next steps were the assignment of credit for courses, the creation of majors, and the formulation of interdepartmental alliances to set distribution requirements. The discipline-centered curriculum, according to Cohen and Brawer (1982) "became so entrenched and so politically important to faculty survival that the rationale for its existence was rarely questioned" (pp. 284-285). As such, the discipline approach was adapted in the community college curriculum.

The term core is used in several different ways but is usually associated with disciplines. According to Taba (1962), a large portion of curricula that are designated by this name represent "nothing more than a method for distinguishing the portions of curriculum required of all students from those which have specialized functions or electives" (p. 407). Alberty (1953) describes six different program designs as core programs:

1. The core consists of a number of logically organized subjects that are taught independently of one another.
2. The core consists of a number of logically organized subjects, some or all of which are correlated.

3. The core consists of broad problems or unifying themes that are chosen because they afford the means of teaching effectively the basic content of certain subjects.
4. The core consists of a number of subjects that are unified or fused. Usually one subject serves as the unifying center.
5. The core consists of broad, preplanned problem areas, from which are selected learning experiences in terms of the psychological and societal needs, problems, and interests of students.
6. The core consists of broad units of work planned by the teacher and the students in terms of needs as perceived by the group. (pp. 119-20)

Conkright (1982) offers various advantages of the discipline-centered curriculum. It is convenient to schedule for the college administration and the faculty; it makes few demands of the staff for curriculum development it fosters a sense of unity among students exposed to the same courses; and it forces students to sample a variety of fields through distribution requirements (p. 6).

The limitation of discipline-centered courses also are clearly evident. Students receive no direct help in integrating their diverse experiences; they lack any common intellectual experience; and they seldom see any models of integrative scholarships (Conkright, 1982).

Integrated Related Curricula

In recent years, integrated courses have become a vital part of the community instructional process (Curtis, 1983). According to Marty (1983), an integrated program stresses teaching that is rooted in academic disciplines. Furthermore, "knowledge does not come organized in disciplines, but is pursued and learned through them" (p. 12). At Dallas Community College, the Skills for Living Program was designed to help students equip themselves for effective living and for responsible citizenship. Three categorical relationships were formulated: living with the developing self, living with others, and living with the environment. Each of these areas included a goal for the college to address and a set of competencies for students that defined the goal (Shaw, 1983).

The disciplines of art, history, science, literature, and related courses were analyzed through the study of the "Great Books." The content was conveyed by a historical method "so that a student has some chronological sense of how the ideas had evolved" (Monroe, 1973, p. 72). Boyer (1980) stated that students should come to understand that there exists a shared common heritage (p. 279). Thus, all students must be introduced "to the events, individuals, ideas, texts, and value systems that have contributed to all human gains and losses" (p. 279).

The integrated model as recognized by Conrad (1978) is also committed to program integration. However, the primary focus of this model is on a variety of subject disciplines, not just one. As argued by Sbaratta (1982), in this era of specialization, this

type of design is essential to end fragmentation. We must implement a more holistic approach to course content and teaching methods in order to broaden and deepen our students' knowledge of their past and better prepare them for survival and growth in the future (p. 34). Similarly, Hursh, Haas, and Moore (1983) stated that education should be more than a diverse knowledge base from which students leap toward areas of specialization (p. 43). As such, the integrated approach requires students to take courses outside of their major, "usually drawn from disciplines representing central areas of knowledge" (Hansen, 1982, p. 251).

Within the past decade, a number of cultural factors have led to an increased interest in integrated programs. In the community college, legislative support for occupational courses, students' need for extensive remedial courses, the emphasis on personal development courses, and the students' rights movement all contributed to the use of the integrated model (Conkright, 1982). Increased adult enrollment in academic and community service programs also contributed to use of the integrated model. Conkright stated that both the cognitive types and the developmental tasks of adults are more consistent with the integrated than with disciplinary mode (p. 8). The integrated approach "deemphasizes processing an acquisition of large amounts of new information, emphasizing instead the cognitive functions calling for integration, interpretation and application of knowledge (Cross, 1981).

Competency Based Related

Cross (1972), while referring to the changing clientele, contended that the form and organization of education would soon change because classroom practices were no longer consistent with purposes. According to Beitler and Lieberman (1980), attempts at educating the masses adhered to the problem. Presently, 99% of the community colleges and 40% of four-year colleges have open doors. Therefore, the purpose of education "is not to select students who will be successful, but to make successful those students who enroll in college" (p. 45). As such, the curriculum model that has emerged out of these circumstances is referred to as competency-based. Outcomes are expressed as competencies or "abilities to perform in an observable and verifiable way" (Carnegie, 1984, p. 124). Winter, McClelland and Stewart (1981, p. 124) describe the approach as a "catch all" for a wide variety of programs. However, most of the programs have three features:

1. A curriculum is divided into units or competencies that are defined in terms that are narrower, sharper, and more operational.
2. Attainment of competencies is measured by performance tests.
3. Flexibility in the preparation is required before competency attainment is verified. (p. 7)

The Carnegie Foundation (1984, p. 125) further characterizes competency-based programs as (a) acceptance of competencies wherever achieved, (b) no time schedule for completion of

programs, and (c) assessment of not only cognitive aptitudes but psychomotor and affective domains as well.

The American Association of Community and Junior Colleges (AACJC) (1986) has as one of its curricular recommendations the need for competency based education. Specifically, the association suggests that all components of the AAS degree requirements should become outcome oriented. Justifying this stance, the AACJC states that common practice in community colleges is to define course and program requirements in terms of subject matter topics. Instead, faculty and academic officers from all components of the program should develop and disseminate a statement of the course and program outcomes that students must achieve. While not all of the course and program outcomes can be measured, there remains a responsibility to define the knowledge, skills, and attitudes students are expected to attain. It is expected, according to the Association, that this outcome orientation will apply to all components of the degree, including general education.

Cohen and Brawer (1982) contended that general education must lead to the ability to do and to act. People who have had a general education are supposed to be able to display certain competencies. To be successful, a general education program not only makes explicit the skills and understandings to be attained but also relates those competencies to external referents to what people are doing when they have achieved them.

Of the attempts to operationally define and measure general education outcomes, some of the American College Testing Program's studies are noteworthy. As revealed by Warren (1982), the program

has defined the competencies in terms of the "ability to apply knowledge, skills, and attitudes to adult roles which is assessed by means of oral and written communication, objective performance tasks, and a self report inventory of activities" (p. 282). This type of an approach resembles the earlier attributes of the "truly educated person" and has received much attention within the community college.

According to Conrad (1978), competency-based programs are as diverse as the traditional types of general education programs. There is also considerable variation in the competencies identified. For instance, Seymour (1974) stressed the need for attention of the following competencies: personal relationships, use of leisure time, logic and clear thinking, law and order, and current affairs. At Alverno College, eight competencies must be achieved if a person is to be able to manage life effectively, make decisions, develop initiatives, and be responsible and confident. They are as follows:

1. Develop communication skills.
2. Sharpen analytical capabilities.
3. Develop problem-solving skills.
4. Develop facilities for independent value judgments.
5. Develop abilities for social interaction.
6. Understand relationships between individuals and the environment.
7. Develop awareness and understanding of the world.
8. Develop appreciation for the arts and humanities.

(Conrad, 1978, p. 80)

Although these competencies are intended to be implemented across all curricula, there is an obvious connection with general education.

However, the fact remains that an integration of the two has raised some issues and challenges. Some educators may think that few assessment problems exist in competency-based instruction because performance is stressed (Grant, 1977, p. 495). But at the foundation of the problem, according to Winter et al. (1981), is the nature of the general education content. In principle, the goals of general education can be expressed as observable outcomes. However, in terms of assessment, criteria for successful performance are typically subjective. Grant et al. (1977) cited as an example the compentency-based program at Alverno. Terming the approach as a "humanistic" delivery (p. 83), the faculty emphasized holistic performances that offered few means for quantitative evaluation.

Assessment of outcomes has been achieved through criteria-referenced evaluations. However, applying these measures to the general education curriculum has some technical problems. Warren (1982, p. 282) stated that this method of testing uses "cut-off scores" that are arbitrary and without reference to any norm group. Thus, the techniques lack "the body of statistical theory that assures validity and reliability as norm-referenced measures" (p. 280). Supporting this criticism, Conrad (1978, p. 81) contends that since it is nearly impossible to measure a liberally educated person, the approach may lead to "trivialization" instead of true liberal learning.

More specifically, the following criteria are suggested for the adoption of assessment procedures for the verification of competencies:

1. The assessment task should be comprehensive and include both objective and subjective rating criteria.
2. Assessment procedures should be sensitive to the development of past skills.
3. Assessment tasks should resemble real life. (Peterson, 1981, p. 172)

Regardless of the lack of normative criteria, a number of institutions have implemented competency-based programs with differing approaches. Grant and his fellow researchers (1973) stated that some of the compentency-based programs have been heavily behavioristic. The authors cited the curriculum at Mt. Hood as an example. The college faculty focused on specific behaviors that could be measured and replicated. Other colleges used a more functional method through analyzing "major functions, typical operations, and skills comprising a role" (p. 4).

Evaluating the voc-ed curriculum at Pensacola Junior College, Walker (1980) states that employers expected graduates to have a wide range of competencies. The author's research determined that the corporate employer wanted "safety-minded persons . . . someone who understood customer relations. . .and someone who could communicate" (p. 6). The direct job skills (welding, typing, surveying, cooking) equipped the graduate to begin the job. The related skills (safety, human relations, communication) equipped the new worker to keep the job.

In terms of general education, it was assumed that the most important competence is decision-making. Therefore, the focus of general education became "deciding scientific issues, deciding political issues, deciding cultural issues, and ultimately, deciding scientific-political-cultural issues.

Issues Confronting General Education in U.S. Community Colleges

In introducing some of the issues of the community college general education curriculum, no attempt is made to present a comprehensive list but only to highlight some areas of concern as expressed by a small but significant group of scholars. The issues have been categorized as external or internal depending upon their focus.

American society includes various elements that warrant the inclusion of a general education curriculum. Although these elements are numerous, there are an equal number that limit the growth of general education in the community college. As a result, many external issues exist; a few of the most potent ones are examined here.

As earlier indicated, many definitions of general education may be given and all distinguish an important and positive value of the programs. However, this in part is cited as a reason for the failure of general education programs in higher education. As observed by O'Banion and Shaw (1982), general education has become "too general" and is often defined as "what it is not" (p. 60). As such, community colleges have been unsuccessful in designing appropriate and innovative programs. Monroe (1973) contends that

numerous programs have been attempted but little agreement on outcomes has been reached. O'Banion and Shaw (1982) stated that general education is practical but "it some how never comes out that way" (p. 64).

Eaton (1982) claimed that the general education curriculum has never fully been defined within the mission of the community college. In this sense, Cohen, (1980) stated that colleges will continue to offer the general education curriculum but exclusively through the transfer course. He warned that rapid change "is essential if the liberal arts are to survive in more than minuscule form" (p. 38).

During the 1960's, while attempting to adapt liberal education to the changing society, educators justified the curriculum by describing it as a "need for tolerance among men" (Harrison, 1973, p. 88). Unfortunately, the reform measures either failed or had no lasting effects. Thornton (1966) stated:

> The data lead inescapably to the conclusion that junior colleges have made relatively little progress in developing well organized curricula for general education. Among the factors responsible for this was the lack of a compelling conviction that an adequate program of general education requires a conscious and systematic effort. (p. 209)

Concurring, Medsker (1960) wrote: "The fact remains that fewer than half of the colleges enforce any requirements beyond English, history and physical education, and fewer than half organize and pattern courses specifically for general education" (p.63).

As recognized by Case (1983), "community colleges speak for their general education programs, most of which can be termed nonprograms when correctly defined" (p. 103). A program should have "institutional recognition" some form or organization, a set of goals and objectives, and the means to accomplish them" (p. 103). Instead, general education is typically a list of courses categorized by departments of divisions and regulated by a body of policy and requirements (Case, 1983). The evidence is conclusive that the community colleges have not, in practice, accepted general education as one of the primary purposes.

Another problem stems from a cultural attack on authority. Bell (1966) has explored the factors that furthered the erosion of general education during the 60's and early 70's. The underlying theme of Bell's work suggests that society was not in control of determining solutions to the cultural problems.

In continuation of Bell's work, Rudolph (1977) wrote of the many forces and adversities that had plagued general education during the previous decade. He found important sources of influence in the changing social order as a dominant issue. "The challenge of the curriculum today is to create an environment that is friendly to the production of social critics and that is responsive to a concern with values and the human experience" (p. 288). The author stated:

> The general education is the artificial respiration of a lifeless ideal. Recent efforts to develop specific courses in values have a synthetic quality about them unless the entire institutional environment is

recognized as making conscious and unconscious statements of value, courses will run the risk of being irrelevant to social needs. (p. 288)

In addition to being influenced by factors that have shaped general education in all postsecondary institutions, general education in the community college has been shaped by factors peculiar to itself.

Friedlander (1983) examined the issue of curricular offerings as it related to student attrition. The author observed that a common issue of the general education curriculum involves the types of course offerings. Typical throughout community college offerings, no precollege courses in the social sciences are designated especially for students who need some assistance in basic skills. Thus, students who are weak in reading, math, or science have no choice but to enroll in courses for which they are not prepared. This raises a concern as to what types of general education courses and competencies ought to be offered.

Parnell's The Neglected Majority (1985) recognizes the importance of a revised general education curriculum. Supporting a "two plus two" arrangement, Parnell stated that community colleges will have to remain comprehensive. Expressing a need for general education, the author wrote, "In today's technological society, colleges simply cannot have first-rate technical-education programs unless they are integrated with liberal programs" (p. 95), which presently they are not.

Hill (1981) suggested that the increase in specialization, while guided by the principle of comprehensiveness, did little

more than produce a "social irrelevance" (p. 130). The curricular offerings had minimal coherence and students seldom shared academic experiences. As a consequence, students "may have graduated with high honors, but in complete ignorance" (Hill, 1981, p. 130).

As observed by Gaff (1983), this shift towards specialization is also attributed to the attitudes of the: "faculty culture" (p. 13). The author stated that higher education witnessed an academic revolution led, for the most part, by faculty members who had interests contrary to the existing offerings in higher education. Consistent with the demand of the nontraditional student, faculties required support for graduate programs and research Priorities and emphasis were placed "on graduate programs more than undergraduate; advanced courses more than introductory or survey courses; and the interests of the departments more than the institutions" (p. 13). Thus, undergraduate general education was considered the least important of the curricular activities.

Instructors of community colleges, regardless of reform measures, "went ahead and taught what they know and wanted to teach by methods that were already familiar to them" (Case, 1983, p. 106). This condition resulted in course content becoming structured around the instructor's choice and specialization. And despite departmental measures to implement change, when innovations were made, they were typically made in the form of experiments that had no lasting effects.

Rudolph (1977) McGrath (1976), and Winter et al. (1981) cited the growth in the number of nontraditional students attending the

traditional programs as having an impact on the general education curriculum. This body of students voiced concerns of accountability and teaching skills. Furthermore, students' needs directed the curriculum towards "a reemphasis on graduate studies and research, at the expense of general education" (McGrath, 1976, p. 27). According to Cross (1977) the new students preferred "to learn what others have said rather that to learn through intellectual engagement" (p. 58). They likewise "tended to possess a more pragmatic, less questioning, more authoritarian system of values than traditional students" (p. 159).

Cohen and Brawer (1982) also point to the changing student demographics as an issue to consider:

> Confronted on the one side by universities wanting better prepared students and on the other side by secondary schools passing through marginally literate, captives of their own rhetoric to provide programs to fit anyone's desires, the community college erected a curriculum resembling more a smorgasbord than a coherent educational plan. (p. 311)

The increase in nontraditional students contributed to the instability of general education in other ways. Community colleges experienced a decline in literacy throughout the 1960's (Cohen & Brawer, 1982; Roueche, 1981). Faculty members became concerned about teaching basic skills. As observed by Cohen and Brawer, faculties could not often link the teaching of basic skills with "critical thinking, values, and cultural perspectives," which were a part of the general education curriculum (p. 32). As such

"general education was shunted aside by those who failed to understand that the curriculum could be taught to everyone. " (p. 32).

Justification for General Education in an Occupational Curriculum

In 1947 the Truman Commission focused on implementing vocational education programs throughout higher education. The Commission also stressed the importance of meshing semi-professional learning with general education to provide students with a combination of social understanding and technical expertise. Although vast changes have occurred in both programs, the mesh has not occurred.

In terms of the occupationally competent student, Perry (1982) offered another perspective on desirable outcomes of the general education curriculum. Occupational competence must include the objective of marketability: the skill must be of such a nature that an employer is willing to pay for performance. Competencies, therefore, "are the skills and sets of knowledge which an employer looks for in an employee who hope to obtain and maintain employment" (Perry, 1982, p. 5). Furthermore, these sets of skills may or may not be directly related to the individual's primary job function, suggesting inclusion of the general education curriculum.

Harris (1967) recommended that all occupational students enrolled in an associate degree take approximately equal proportions of specialized skill training, technical and theory courses, and general education. Weigman (1969) called for the

design of special general education courses in economics, social sciences, humanities, science, communication, physical education, and health for occupational students. The author states that courses of this nature are essential to acquaint students with the best in "aesthetic literacy, and intellectual areas of living and should prepare students for use of their leisure time" (p. 4).

Answering the question, "Must job conscious college students be forced to choose between the highly touted advantages of a liberal education and the practical appeal of a specialized curriculum?" Stark (cited in Jacobson, 1986) of the University of Michigan suggests no. Stark bases her response on the data drawn from faculty members of professional programs at four-year colleges and universities. She concludes that courses traditionally within the province of the liberal arts core are being absorbed into the professional or specialized programs to ensure relevance to the changing nature of professional practice (p. 26).

The AACJC (1986) has undertaken a continuing study to make the Associate in Applied Science degree more applicable to students' goals for immediate employment without foregoing the opportunity for further education and advancement. Noted in the recommendation, and relevant to this study, is support for inclusion of the general education curriculum. The Association suggests that this technical specialty component should constitute 50% to 75% of the course credit. However, the general education component of AAS degree programs should constitute a minimum of 25% of the course credits with the combination of general

education and related studies constituting up to 50% of the course credits. The justification behind this recommendation is an increased recognition of the importance of general education and related studies as integral components of occupational education. Increasingly, the ability to "think, reason, compute, communicate and adapt to change" (AACJC, 1986, p. 1) are essential if workers at all levels are to remain employable and cope with the expanding knowledge base.

The AACJC (1986) offered that learning in the humanities is particularly critical in two-year colleges. This is because of the strong interest on the part of students in practical education. However, according to th\ \ssociation, it is important that students become economically self-supporting. But it is equally important for them to "broaden their horizons so they may participate willingly and wisely in a fuller range of human activity" (p. 1).

Associating the worth of a humanities education with technology, the AACJC (1986) indicates that the development of advanced technologies requires not only higher order processes of intelligence, but also a keen appreciation of the impact of technology on the human environment. Furthermore, the humanities concentrate in direct ways on skills of the mind and skills of language, while the abilities to reason clearly and communicate well should be a goal of all branches (p.1). Furthermore, the study of the humanities nurtures the imagination and offers individual and private pleasure. It encourages the best habits of mind; fosters disciplined approaches to questions that do not have

necessarily correct answers; enhances ability to make value judgments; and inculcates a sense of common culture, encouraging civic purpose and citizenship practices (p. 2).

Morgan (1978) examined the administration of general education programs in two-year vocational institutes. Noting the fact that conflict between general education instructors and vocational teachers places the general education staff on the defensive, Morgan argues that (a) general education should be considered in the curriculum planning process, (b) general education instructors should work together with vocational staff in developing instructional materials so as to increase communicatic .., (c) general education instructors should find additional ways of making these courses relevant to students, and (d) employers should be reminded that general education produces well-rounded workers.

Still a concern is the role and delivery of general education in community college vocational programs. Bartkovitch (1981) argues both for and against the inclusion of general education in vocational curricula. Arguing for general education, he noted the importance of providing humanistic, pragmatic, and theoretical concepts in a holistic sense to the student, who would otherwise be exposed to only specific technical skills. Bartkovitch's basis for exclusion of general education focused on the students' desires and interests for general education courses, the lengthening of voc-ed programs due to general education requirements, and the belief that students' personal and social skills can be improved without general education.

There is widespread belief that community college programs of general education are in need of review. Boyer and Levine (1981) maintained that many colleges have never reached agreement regarding the substance of general education within curricular programs.

In determining the value of a general education within the vocational education curriculum, additional opinions can be cited supporting or refuting the joining of the two. Of those arguments against the inclusion of general education in vocational programs, points have been made describing conflict between curricula instruction. Similarly, many students are not in favor of required general education courses due to personal goals or abilities. The arguments cited in favor of general education inclusion include (a) occupational competence must include general education skills; (b) occupational advancement is contingent upon general education proficiencies; and (c) less specific technical skills are needed in non-occupational settings.

Amount of General Education in Occupational Programs

Faculty in occupational education as well as employers and consultants have expressed a need for general education as it inculcates students with competencies essential for career satisfaction. Perkins (1985) determined that community college personnel and corporate employers agreed that approximately one-third of the students' programs should consist of general knowledge, skills, and attitude competencies. More specifically, communication skills and critical thinking were the most highly

favored. Furthermore "capability for vocational adjustment, mathematics, skills, knowledge of science, and knowledge of economics" (p. 120) comprised a second set of competencies believed to be important (p. 120).

Despite the recommendations, most community colleges continue to offer traditional general education courses to the occupational students. For instance, according to Mapp (1980) slightly over one-third of the colleges investigated included a wide range of general education requirements of occupational students. However, the institutions did not always support the goals. Competencies relating to citizenship, communication skills, and use of leisure time were typical program requirements with little fluctuation for the vocational students. As a result, students have been "conditioned to dislike or disregard the importance" of the general education curriculum. Furthermore, the idea of being forced to take the general education requirements tended to keep potential occupational students out of community colleges (Crandall, 1975, p. 62). Kroeger and Brace (1971) also argued that occupational students do not want to take general education courses. As a result many, of the most skilled occupational students often flunk out of their programs for failing general education programs. Also, many students ignore the potential for developing competencies in other areas.

Armistead (1987) studied the actual amounts of general education taken by occupational graduates and leavers in contrast to the desired or optimal amounts. Differences were determined between the views of graduates and leavers of associate in applied

science and certificate degrees. The findings indicate that the optimal amounts of the three program requirements differ according to degree programs and graduation status.

Specifically, AAS graduates stated that approximately 60% of the program requirements should be within the technical realm. AAS leavers and certificate leavers indicated that 54% of specialty requirements was desired. Certificate graduates revealed that 50% of the requirements was sufficient.

The optimal amount of general education was approximately equal across the four groups. AAS graduates and certificate leavers desired the least amount, ranging from 25% to 26%, respectively. The percentages desired by AAS leavers and certificate graduates were also similar, averaging approximately 29%.

The optimal amount of related course requirements varied among the groups. Both groups of AAS students requested less of an emphasis of the related course component. Certificate degree students stated that roughly one-fifth of total course requirements should be devoted to related courses.

Further, Armistead (1987) found that occupational students in AAS and certificate degree programs exceeded the general education requirements established by the college under the VCCS guidelines. Both AAS graduates and leavers devoted approximately 32% of their total credit hours to general education. In contrast, the two groups of certificate degree students completed a higher proportion of general education with respect to total hours.

Certificate graduates completed 34% while certificate leavers had completed an even higher proportion, 40%.

Analysis of the findings indicated that the large proportions of general education completed by the four groups were due primarily to program requirements. More than 87% of AAS graduates stated that the primary reason for enrolling in general education courses was because of program requirements. The same was true for 75% of the AAS leavers. The proportions indicated by certificate graduates and leavers tended to be lower than AAS students because approximately 8 percent had chosen to take no general education courses.

Additional analysis determined that AAS graduates and leavers completed 32 and 24 credit hours of required general education, respectively. This is in contrast to 23 credit hours completed by certificate graduates and 15 credit hours for certificate leavers. Fewer elective credit hours in general education were taken by the two groups of leavers.

Importance of General Education in Occupational Programs

A 1973 study reported by Rudolph (1977) determined that many colleges and universities had a difficult time maintaining the general education core. Analyzing a national study, Blackburn et al. (1976) revealed a gradual decline in the proportion of general education in the undergraduate course of study during the 1960's. They observed that in 1967, 43% of the curriculum constituted general education.

However, by 1974, this figure was reduced to 33%. Furthermore, the "character" of general education programs also changed. Four-fifths of the four-year institutions decreased their proportion of "prescribed" general education courses.

Other program personnel, particularly those in the mechanical/engineering technologies, desired a greater amount of technical education and less general education than do liberal arts/general education personnel (p. 131). Similarly, with regard to general education competencies, mechanical/engineering faculty valued critical thinking and mathematics very highly, while liberal arts/general education faculty emphasized much more than technical fa .lty, a knowledge of art and literature.

Perkins' study (1985) revealed other disparities with administrative views of general education. He distinguished that certain groups of competencies were regarded as more important than others. Two competencies were valued more highly than any others: communication skills and critical thinking. Judged least important among the competencies were three that appeared to be linked by "humanistic or cultural context" (p. 13): (a) employment and fine arts and literature; (b) perspective of economic, political, and cultural issues; and (c) appreciation of cultural heritage.

Perkins' (1985) found that there is consensus among employers and academic personnel with regard to the amount of general education. Corporate employers agreed that about one-third of a total program should be devoted to general education. Further, they agreed that the greatest amount of emphasis within the

general education component should be on insuring that graduates demonstrate competence in communication and critical thinking. When the responses of employers were examined on the basis of affiliation with manufacturing, merchandising, or nonprofit enterprises, no differences were found in the importance of general education.

Consistent with Perkins, Meyer (1983) analyzed the views of 28 corporated managers regarding essential and desired general education competencies. Her study revealed that employers believe that general education competencies are critically important in getting a job and being successful on the job. More specifically, ...e respondents agreed that the essential competencies included factual communication skills, cognitive skills, inquiry skills, technical writing skills, and self-directed skills. Consistent with Perkins' study, Meyer determined that historic awareness, cultural background awareness, and literature skills were less important in associate degree programs. Generally, the following conclusions were drawn from Meyer's data.

1. General education competencies must be identified and incorporated in every occupational program.
2. General education should be a prescribed program of study of all students from a corporate point of view.
3. Technical graduates should recognize that employers are looking for the adaptive skills of general education, and these skills are necessary for success (p. 96).

Most of the debate on general education is from the perspectives of administrators, faculty, and employers concerning curricular philosophy, structures, and subject matter. The revision of general education is often conducted by faculty members and administrators without the meaningful involvement of students (Gaff, 1980). Therefore, few efforts have delved into students' views of general education.

Using transcript analysis as a research methodology, Beeken (1982) investigated student course-taking patterns in general education at three community colleges in Virginia. The purpose was to discover the number and kinds of general education courses actually taken by community college students. The data indicated that the programs of many students were out of balance, specifically lacking in mathematics, and science. Two types of general education were evident in student transcripts: one kind of general education was taken by the occupational-technical student; another, by the transfer student. The number of courses taken in different curricular areas of general education was generally related to enrollment status, age, and gender.

Beeken (1982) observed that about three-fourths or more of the credits hours taken by transfer students were in general education. Nontransfer students also either met or exceeded the minimum general education course requirements. Both completers and noncompleters of programs took an average of 13 or 14 courses in general education even though the minimum requirement was about eight for associate degrees. Beeken noted that the majority of the extra courses above those required in general education were most

likely taken to fulfill specialized course requirements in nontransfer programs.

Of the five groups in Beeken's study (transfer completers, transfer noncompleters, nontransfer completers, nontransfer noncompleters and noncurricular), noncurricular students took the smallest proportion of general education courses (37.8%) while transfer completers took the most (85.5%).

Armistead (1987) studied the views of community college graduates and leavers of occupational programs as to the importance of general education competencies and courses. It was determined that English, mathematics, and economics were consistently recognized as the most important general education courses. Further, courses within the fine arts and natural sciences were viewed as less important. Disciplines that were skill-oriented tended to be viewed as more important than nonskill-oriented courses. There were competencies that occupational students agreed should be emphasized. Communication skills, critical thinking skills, vocational adjustment skills, and human relations skills, were central. These competencies tended to be integrative in nature and easily adaptive to other kinds of courses, whether humanistic or technical. Competencies related to the fine arts, sciences, and ethical sensitivity were viewed as less important by occupational students.

Summary

General education presents several problems to community college academic planners and designers whose responsibility it

is to devise effective approaches to the general education component of the curriculum. Design problems involving discipline approach, integrated approach, and the competency-based approach are at issue. These problems have become heightened in recent years due to changes in higher education. The demands for accountability and observable outcomes, typically a part of the vocational education curriculum, have now been carried over into the general education component. Furthermore, society is now demanding that colleges recognize student priorities and respond to the perceptions they bring. Under these new conditions, the traditional curriculur designs, including discipline and integrated approaches, have limitations. An updated approach based upon a set of competencies expressed in terms of measurable skills, clearly defined assessment tasks, and levels of performance is an appealing alternative.

Shifts in enrollments have resulted in expansion of the vocational education curriculum. Today as much as 70% of the total student body is enrolled in occupational programs. Thus, the traditional purposes of general education are being challenged and the issue of what type of general education can best serve the occupational student is being debated.

Students tend not to view general education as a means of providing the needed skills necessary for employment upon graduation. Focusing on vocational education students, only a small percentage of those enrolled in a liberal arts course did so to acquire or improve occupational skills. Similarly, very few

students participate in a general education course to develop basic learning skills, such as English or math.

The amount and importance of general education varies. Presently, community college associations and governing boards recommend that one-fourth to one-third of the students' education should consist of general education. To comply with this recommendation, administrators and faculties typically specify a minimum number of general courses. However, not concerned with number of courses, corporate employers look for desirable general education competencies. It therefore appears that an integrated and competency approach to curriculum design for occupational education is in order.

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